CLAIMS

[1] A film bonding machine comprising a laser oscillation means for oscillating laser for processing a tape bonded onto an end surface of a columnar honeycomb structural body by the laser oscillated from the laser oscillation means, further comprising:

an image pick-up means having a moving type or tilt type mirror capable of reflecting the end surface of the honeycomb structural body onto the same axis as the laser oscillation means by reflected light and an image pick-up unit for picking up the image of the end surface of the honeycomb structural body reflected by the mirror,

wherein the processing position of the tape bonded onto the end surface of the honeycomb structural body can be recognized by the image-pick means on the same axis as the laser oscillation means.

[2] A film bonding machine according to claim 1, further comprising a honeycomb structural body moving means capable of gripping and moving the honeycomb structural body.

[3] A film bonding machine according to claim 1 or 2 further comprising a tape bonding means for bonding the tape onto the end surface of the honeycomb structural body.

[4] A film bonding machine according to claim 3, wherein bonding of the tape onto the end surface of the honeycomb structural body carried out by the tape bonding

means, picking-up of the image of the end surface of the honeycomb structural body carried out by the image-pick means, and processing of the tape bonded onto the end surface of the honeycomb structural body carried out by the laser oscillated from the laser oscillation means can be continuously executed by gripping and moving the honeycomb structural body by the honeycomb structural body moving means.

[5] A film bonding machine according to any of claims 1 to 4, wherein the angle of view of the laser oscillation means is approximately the same as the angle of view of the image pick-up unit constituting the image-pick means.

[6] A film bonding machine according to any of claims 1 to 5 further comprising a correction means for correcting the distortion in the laser oscillation means and in the image pick-up unit constituting the image-pick means by segmenting the image obtained by the image pick-up unit.

[7] A film bonding machine according to any of claims 1 to 6, wherein the laser oscillation means is YAG laser, CO_2 laser, or UV laser.

[8] A film bonding machine according to any of claims 1 to 7, wherein the image pick-up unit is a CCD camera.

[9] A film bonding machine according to any of claims 3 to 8, wherein the tape bonding means bonds the band-shaped tape wound in a roll state onto the end surface of the

honeycomb structural body while drawing out it by a predetermined amount.

[10] A film bonding machine according to any of claims 1 to 9, wherein the laser oscillation means cuts the tape bonded onto the end surface of the honeycomb structural body along the outer peripheral shape of the end surface thereof.

[11] A film bonding machine according to any of claims 1 to 9, wherein the laser oscillation means forms a through hole to the tape bonded onto the end surface of the honeycomb structural body at the predetermined position thereof.